



United States
Department of
Agriculture

**Animal and
Plant Health
Inspection
Service**



USDA Wildlife Services Protects Natural Resources

Recovering Threatened and Endangered Species, Guarding Against Invasive Species, Preserving Wildlife and Game Habitats

Overview

Wildlife Services (WS), a program within the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, provides Federal leadership and expertise to resolve wildlife conflicts that threaten the nation's natural resources. WS works in every State to protect and preserve natural resources, such as wetland habitats, forests, and threatened and endangered species that are vital parts of America's unique landscape.

Protecting Threatened and Endangered Species

In fiscal year (FY) 2002, WS actively protected 157 Federal and State listed threatened and endangered species. WS' work consisted of 98 projects conducted in 29 States, Puerto Rico, and the U.S. Virgin Islands. More than 96 percent of these projects resulted in the increase or maintenance of local threatened and endangered species populations.

In 2001, Alaska's Aleutian Canada goose was officially removed from the list of federally threatened species, due in part to WS' efforts to prevent predation by the arctic fox. With WS' help, the Aleutian Canada goose population grew from a few hundred in the late 1970's to more than 20,000 today. In Florida alone, WS protects 14 threatened and endangered species, including five species of sea turtles. WS' efforts to revive the Monterey Bay Western snowy plover colony in California resulted in an 85 percent hatching success rate with no documented predation for 2001.

In addition to protecting the smallest of species like the snowy plover, WS also plays a crucial role in wolf reintroduction programs in the Western United States sponsored by the U.S. Fish and Wildlife Service (FWS). As new wolf populations become established, WS works to prevent livestock predation by wolf packs and relocate or remove problem animals. By providing prompt and effective responses to complaints of wolf predation, WS helps reduce livestock losses to wolves and helps promote greater tolerance for wolves by affected local communities and ranchers. The successful wolf reintroduction program in Yellowstone National Park can be directly attributed to cooperation from local and regional landowners. In addition, WS' efforts to manage impacts of depredating wolves in the Northern Rocky Mountain region have allowed FWS to publish a



proposed rule to reclassify the gray wolf in those areas from endangered to threatened. The program has met with similar success in Minnesota where WS' trapping and predator management methods have contributed to the growth of the wolf population and its expansion into Michigan and Wisconsin, resulting in plans by FWS to remove the gray wolf in these areas from the threatened and endangered species list.

Managing Invasive Species

WS predator management efforts are especially important in protecting federally listed species and preserving island ecosystems such as Hawaii, Puerto Rico, and San Clemente Island, CA. Nonnative, invasive predators can be devastating to island ecosystems where a lack of natural enemies and competition for resources can allow these species to thrive, wiping out other native wildlife in the process. WS' research efforts target these introduced and invasive species, especially rodents, which are a main cause of damage to island habitats. This research has led to the development of more efficient predator removal techniques, allowing WS to target only those predators that are directly impacting populations of threatened and endangered species.

One of the most ecologically damaging invasive species is the brown tree snake (BTS). Accidentally introduced to Guam in the late 1940's or early 1950's, the BTS has caused extensive economic and ecological damage to the island. In just half a century, the BTS has exterminated most of Guam's native forest birds and greatly reduced its population of fruit bats and native lizards. In addition to



managing the BTS population on Guam, WS is actively engaged in preventing its spread to other Pacific islands, especially Hawaii. The program's work is concentrated at military and sea ports as well as commercial warehouses. WS uses specially-trained Jack Russell terriers to inspect departing cargo for "hitchhiking" snakes. WS also sets specially-designed snake traps around cargo areas. Since the BTS program began in 1993, more than 4,500 snakes have been removed from Guam's ports each year.

The BTS is not the only invasive reptile threatening the nation's natural resources. WS is currently engaged in managing 2 invasive frog species, which were introduced into Hawaii from the Caribbean about 10 years ago along with shipments of nursery plants. These frogs compete with native birds for prey and are significant predators of local Hawaiian invertebrates. WS has investigated potential nonlethal and lethal management methods, including small scale trapping, hand capture, and the development of pesticides that utilize caffeine and citric acid.

In Hawaii, WS cooperates with FWS, the Navy, the Army, the State of Hawaii, and the Nature Conservancy to control feral hogs that prey on several species of endangered plants, tree snails, and forest birds. WS' mongoose control work on Puerto Rico has had a tremendous impact on the conservation of the entire Puerto Rican parrot population. In New Hampshire, removal of ground hogs to reduce foraging on the wild lupine has helped to recover the endangered Karner blue butterfly, which is completely dependent on the wild lupine for its reproductive cycle.

Preserving Wildlife and Game Habitats

The dramatic increase in beaver populations and the low demand for fur and other beaver products has exacerbated the negative impact of beaver on hardwood riverine habitats. In Oklahoma, the number of requests WS receives to handle beaver complaints has increased by 300 percent since 1985. And in North Carolina, from 1993 to 2000, WS received more than 7,000 requests for assistance with

beaver damage problems. WS research has developed a new textural repellant that has had favorable results when used by WS specialists. In addition, WS employs certified explosives experts that are frequently called upon to remove beaver dams that stop up water flow and cause flooding to forests and other wildlife habitat. In Wisconsin, WS maintains 750 miles of pristine trout streams throughout the State that have been seriously degraded by overabundant beaver populations and their dam building activities. WS manages beaver populations on these streams to eliminate the widespread flooding of forested land and to allow native trout to once again reproduce naturally.

Beavers, however, are not the only wildlife species damaging natural resources. WS works to protect shell-fish beds in Connecticut from contamination by Canada geese. Cormorants are another bird species causing significant damage to the nation's natural resources. WS provides assistance to the State of Rhode Island to prevent cormorants from destroying island colonial bird nesting habitat. In addition, double-crested cormorant populations are increasing dramatically in the Great Lakes region. Concern exists that these birds and their voracious appetites are having an unacceptable impact on native habitat and sports-fishing.

WS' efforts to protect natural resources and provide assistance to State wildlife agencies and private game ranches, enhances opportunities for the hunting and fishing public to enjoy species that are impacted by predation. WS is currently conducting programs in 8 States to bolster populations of game and sport species. For example, programs have been implemented to revive declining deer herds in several Western states. Efforts are also underway to determine how to restore bobwhite quail populations that have steadily declined in the southern United States. In addition, WS is working in New York to investigate nonlethal techniques for reducing the impact of double-crested cormorants on local sport fisheries.

